

From: akornick@whg-florida.dyndns.org@inetgw
To: Microsoft ATR
Date: 1/23/02 10:10am
Subject: Microsoft Settlement

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To Whom It May Concern,

I have cited below numerous problems with the proposed Microsoft settlement below. Please do not allow Microsoft to continue to enjoy an illegal monopoly by slapping them on the wrist like the last US DOJ/Microsoft agreement.

Sincerely,

Adam M. Kornick

Here is a very rough summary which paraphrases provisions III.A through III.J and VI. of the Proposed Final Judgement to give some idea of how the PFJ proposes to answer those questions:
PFJ Section III: Prohibited Conduct

1. Microsoft will not retaliate against OEMs who support competitors to Windows, Internet Explorer (IE), Microsoft Java (MJ), Windows Media Player (WMP), Windows Messenger (WM), or Outlook Express (OE).
2. Microsoft will publish the wholesale prices it charges the top 20 OEMs (Original Equipment Manufacturers) for Windows.
3. Microsoft will allow OEMs to customize the Windows menus, desktop, and boot sequence, and will allow the use of non-Microsoft bootloaders.
4. Microsoft will publish on MSDN (the Microsoft Developer Network) the APIs used by IE, MJ, WMP, WM, and OE, so that competing web browsers, media players, and email clients can plug in properly to Windows.
5. Microsoft will license on reasonable terms the network protocols needed for non-Microsoft applications or operating systems to connect to Windows servers.
6. Microsoft will not force business partners to refrain from supporting competitors to Windows, IE, MJ, WMP, WM, or OE.
7. (Roughly same as F above.)
8. Microsoft will let users and OEMs remove icons for IE, MJ, WMP, WM, and OE, and let them designate competing products to be used instead.
9. Microsoft will license on reasonable terms any intellectual property rights needed for other companies to take advantage of the terms of this settlement.
10. This agreement lets Microsoft keep secret anything having to do with security or copy protection.

PFJ Section VI: Definitions

1. "API" (Application Programming Interface) is defined as only the interfaces between Microsoft Middleware and Microsoft Windows, excluding Windows APIs used by other application programs.
2. "Microsoft Middleware Product" is defined as Internet Explorer (IE), Microsoft Java (MJ), Windows Media Player (WMP), Windows Messenger (WM), and Outlook Express (OE).
3. "Windows Operating System Product" is defined as Windows 2000 Professional, Windows XP Home, and Windows XP Professional.

The agreement can be summed up in one breath as follows: Microsoft agrees to compete somewhat less vigorously, and to let competitors interoperate with Windows in exchange for royalty payments.

Considering all of the above, one should read the detailed terms of the Proposed Final Judgment, and ask one final question:

MTC-00015835_0002

* Is the Proposed Final Judgement in the public interest?

In the sections below, I'll look in more detail at how the PFJ deals with the above questions.

How should terms like "API", "Middleware, and "Windows OS" be defined?

The definitions of various terms in Part VI of the PFJ differ from the definitions in the Findings of Fact and

in common usage, apparantly to Microsoft's benefit. Here are some examples:

Definition A: "API"

The Findings of Fact (? 2) define "API" to mean the interfaces between application programs and the operating system. However, the PFJ's Definition A defines it to mean only the interfaces between Microsoft Middleware

and Microsoft Windows, excluding Windows APIs used by other application programs. For instance, the PFJ's

definition of API might omit important APIs such as the Microsoft Installer APIs which are used by installer

programs to install software on Windows.

Definition J: "Microsoft Middleware"

The Findings of Fact (? 28) define "middleware" to mean application software that itself presents a set of

APIs which allow users to write new applications without reference to the underlying operating system.

Definition J defines it in a much more restrictive way, and allows Microsoft to exclude any software from

being covered by the definition in two ways:

1. By changing product version numbers. For example, if the next version of Internet Explorer were named "7.0.0" instead of "7" or "7.0", it would not be deemed Microsoft Middleware by the PFJ.

2. By changing how Microsoft distributes Windows or its middleware. For example, if Microsoft introduced a version of Windows which was only available via the Windows Update service, then nothing in that version of Windows would be considered Microsoft Middleware, regardless of whether Microsoft added it initially or in a later update. This is analogous to the loophole in the 1995 consent decree that allowed Microsoft to bundle its browser by integrating it into the operating system.

Definition K: "Microsoft Middleware Product"

Definition K defines "Microsoft Middleware Product" to mean essentially Internet Explorer (IE), Microsoft Java (MJ), Windows Media Player (WMP), Windows Messenger (WM), and Outlook Express (OE).

The inclusion of Microsoft Java and not Microsoft.NET is questionable; Microsoft has essentially designated

Microsoft.NET and C# as the successors to Java, so on that basis one would expect Microsoft.NET to be included in the definition.

The inclusion of Outlook Express and not Outlook is questionable, as Outlook (different and more powerful than

Outlook Express) is a more important product in business, and fits the definition of middleware better than Outlook Express.

The exclusion of Microsoft Office is questionable, as many components of Microsoft Office fit the Finding of

Fact's definition of middleware. For instance, there is an active market in software written to run on top of

Microsoft Outlook and Microsoft Word, and many applications are deveoped for Microsoft Access by people who

have no knowledge of Windows APIs.

Definition U: "Windows Operating System Product"

Microsoft's monopoly is on Intel-compatible operating systems. Yet the PFJ in definition U defines a "Windows Operating System Product" to mean only Windows 2000 Professional, Windows XP Home, Windows XP Professional, and their successors. This purposely excludes the Intel-compatible operating systems Windows XP Tablet PC Edition and Windows CE; many applications written to the Win32 APIs can run unchanged on Windows 2000, Windows XP Tablet PC Edition, and Windows CE, and with minor recompilation, can also be run on Pocket PC. Microsoft even proclaims at www.microsoft.com/windowsxp/tabletpc/tabletpcqanda.asp: "The Tablet PC is the next-generation mobile business PC, and it will be available from leading computer makers in the second half of 2002. The Tablet PC runs the Microsoft Windows XP Tablet PC Edition and features the capabilities of current business laptops, including attached or detachable keyboards and the ability to run Windows-based applications." and Pocket PC: Powered by Windows Microsoft is clearly pushing Windows XP Tablet PC Edition and Pocket PC in places (e.g. portable computers used by businessmen) currently served by Windows XP Home Edition, and thus appears to be trying to evade the Final Judgment's provisions. This is but one example of how Microsoft can evade the provisions of the Final Judgment by shifting its efforts away from the Operating Systems listed in Definition U and towards Windows XP Tablet Edition, Windows CE, Pocket PC, X-Box, or some other Microsoft Operating System that can run Windows applications. How should the Final Judgment erode the Applications Barrier to Entry? The PFJ tries to erode the Applications Barrier to Entry in two ways:

1. By forbidding retaliation against OEMs, ISVs, and IHVs who support or develop alternatives to Windows.
2. By taking various measures to ensure that Windows allows the use of non-Microsoft middleware.

A third option not provided by the PFJ would be to make sure that Microsoft raises no artificial barriers against non-Microsoft operating systems which implement the APIs needed to run application programs written for Windows. The Findings of Fact (?52) considered the possibility that competing operating systems could implement the Windows APIs and thereby directly run software written for Windows as a way of circumventing the Applications Barrier to Entry. This is in fact the route being taken by the Linux operating system, which includes middleware (named WINE) that can run many Windows programs.

By not providing some aid for ISVs engaged in making Windows-compatible operating systems, the PFJ is missing a key opportunity to encourage competition in the Intel-compatible operating system market. Worse yet, the PFJ itself, in sections III.D. and III.E., restricts information released by those sections to be used "for the sole purpose of interoperating with a Windows Operating System Product". This prohibits ISVs from using the information for the purpose of writing operating systems that interoperate with Windows programs.

How should the Final Judgment be enforced?

The PFJ as currently written appears to lack an effective enforcement mechanism. It does provide for the creation of a Technical Committee with investigative powers, but appears to leave all actual enforcement to the legal system. What information needs to be released to ISVs to encourage competition, and under what terms?

The PFJ provides for increased disclosure of technical information to ISVs, but these provisions are flawed in several ways:

1. The PFJ fails to require advance notice of technical requirements

Section III.H.3. of the PFJ requires vendors of competing middleware to meet "reasonable technical

requirements" seven months before new releases of Windows, yet it does not require Microsoft to disclose those

requirements in advance. This allows Microsoft to bypass all competing middleware simply by changing the

requirements shortly before the deadline, and not informing ISVs.

2. API documentation is released too late to help ISVs

Section III.D. of the PFJ requires Microsoft to release via MSDN or similar means the documentation for the

APIs used by Microsoft Middleware Products to interoperate with Windows; release would be required at the time

of the final beta test of the covered middleware, and whenever a new version of Windows is sent to 150,000

beta testers. But this information would almost certainly not be released in time for competing middleware

vendors to adapt their products to meet the requirements of section III.H.3, which states that competing

middleware can be locked out if it fails to meet unspecified technical requirements seven months before the

final beta test of a new version of Windows.

3. Many important APIs would remain undocumented

The PFJ's overly narrow definitions of "Microsoft Middleware Product" and "API" means that Section III.D.'s

requirement to release information about Windows interfaces would not cover many important interfaces.

4. Unreasonable Restrictions are Placed on the Use of the Released Documentation

ISVs writing competing operating systems as outlined in Findings of Fact (?52)

sometimes have difficulty

understanding various undocumented Windows APIs. The information released under section III.D. of the PFJ

would aid those ISVs -- except that the PFJ disallows this use of the information.

Worse yet, to avoid running

afoul of the PFJ, ISVs might need to divide up their engineers into two groups: those who refer to MSDN and

work on Windows-only applications; and those who cannot refer to MSDN because they work on applications which

also run on non-Microsoft operating systems. This would constitute retaliation against ISVs who support

competing operating systems.

5. File Formats Remain Undocumented

No part of the PFJ obligates Microsoft to release any information about file formats, even though undocumented

Microsoft file formats form part of the Applications Barrier to Entry (see "Findings of Fact" ?20 and ? 39).

6. Patents covering the Windows APIs remain undisclosed

Section III.I of the PFJ requires Microsoft to offer to license certain intellectual property rights, but it

does nothing to require Microsoft to clearly announce which of its many software patents protect the Windows

APIs (perhaps in the style proposed by the W3C; see

[http://www.w3.org/TR/2001/WD-patent-policy-20010816/#sec-](http://www.w3.org/TR/2001/WD-patent-policy-20010816/#sec-disclosure)

disclosure). This leaves Windows-compatible operating systems in an uncertain state: are they, or are they not

infringing on Microsoft software patents? This can scare away potential users, as illustrated by this report

from Codeweavers, Inc.:

When selecting a method of porting a major application to Linux, one prospect of mine was comparing Wine [a

competing implementation of some of the Windows APIs] and a toolkit called 'MainWin'. MainWin is made by

Mainsoft, and Mainsoft licenses its software from Microsoft. However, this customer elected to go with the

Mainsoft option instead. I was told that one of the key decision making factors was that Mainsoft representatives had stated that Microsoft had certain critical patents that Wine was violating. My customer could not risk crossing Microsoft, and declined to use Wine. I didn't even have a chance to determine which patents were supposedly violated; nor to disprove the validity of this claim. The PFJ, by allowing this unclear legal situation to continue, is inhibiting the market acceptance of competing operating systems. Which practices towards OEMs should be prohibited? The PFJ prohibits certain behaviors by Microsoft towards OEMs, but curiously allows the following exclusionary practices:

Section III.A.2. allows Microsoft to retaliate against any OEM that ships Personal Computers containing a competing Operating System but no Microsoft operating system.

Section III.B. requires Microsoft to license Windows on uniform terms and at published prices to the top 20 OEMs, but says nothing about smaller OEMs. This leaves Microsoft free to retaliate against smaller OEMs, including important regional 'white box' OEMs, if they offer competing products.

Section III.B. also allows Microsoft to offer unspecified Market Development Allowances -- in effect, discounts -- to OEMs. For instance, Microsoft could offer discounts on Windows to OEMs based on the number of copies of Microsoft Office or Pocket PC systems sold by that OEM. In effect, this allows Microsoft to leverage its monopoly on Intel-compatible operating systems to increase its market share in other areas, such as office software or ARM-compatible operating systems.

By allowing these practices, the PFJ is encouraging Microsoft to extend its monopoly in Intel-compatible operating systems, and to leverage it into new areas. Which practices towards ISVs should be prohibited? Sections III.F. and III.G. of the PFJ prohibit certain exclusionary licensing practices by Microsoft towards ISVs.

However, Microsoft uses other exclusionary licensing practices, none of which are mentioned in the PFJ.

Several of Microsoft's products' licenses prohibit the products' use with popular non-Microsoft middleware and operating systems. Two examples are given below.

1. Microsoft discriminates against ISVs who ship Open Source applications

The Microsoft Windows Media Encoder 7.1 SDK EULA states

... you shall not distribute the REDISTRIBUTABLE COMPONENT in conjunction with any Publicly Available

Software. "Publicly Available Software" means each of (i) any software that contains, or is derived in any

manner (in whole or in part) from, any software that is distributed as free software, open source software

(e.g. Linux) or similar licensing or distribution models ... Publicly Available Software includes, without

limitation, software licensed or distributed under any of the following licenses or distribution models, or

licenses or distribution models similar to any of the following: GNU's General Public License (GPL) or

Lesser/Library GPL (LGPL); The Artistic License (e.g., PERL); the Mozilla Public License; the Netscape Public

License; the Sun Community Source License (SCSL); ... Many Windows APIs, including Media Encoder, are shipped

by Microsoft as add-on SDKs with associated redistributable components. Applications

that wish to use them must include the add-ons, even though they might later become a standard part of Windows. Microsoft often provides those SDKs under End User License Agreements (EULAs) prohibiting their use with Open Source applications. This harms ISVs who choose to distribute their applications under Open Source licenses; they must hope that the enduser has a sufficiently up-to-date version of the add-on API installed, which is often not the case.

Applications potentially harmed by this kind of EULA include the competing middleware product Netscape 6 and the competing office suite StarOffice; these EULAs thus can cause support problems for, and discourage the use of, competing middleware and office suites. Additionally, since Open Source applications tend to also run on non-Microsoft operating systems, any resulting loss of market share by Open Source applications indirectly harms competing operating systems.

2. Microsoft discriminates against ISVs who target Windows-compatible competing Operating Systems

The Microsoft Platform SDK, together with Microsoft Visual C++, is the primary toolkit used by ISVs to create Windows-compatible applications. The Microsoft Platform SDK EULA says: "Distribution Terms. You may reproduce and distribute ... the Redistributable Components... provided that (a) you distribute the Redistributable Components only in conjunction with and as a part of your Application solely for use with a Microsoft Operating System Product..." This makes it illegal to run many programs built with Visual C++ on Windows-compatible competing operating systems.

By allowing these exclusionary behaviors, the PFJ is contributing to the Applications Barrier to Entry faced by competing operating systems.

Which practices towards large users should be prohibited?

The PFJ places restrictions on how Microsoft licenses its products to OEMs, but not on how it licenses

products to large users such as corporations, universities, or state and local governments, collectively

referred to as 'enterprises'. Yet enterprise license agreements often resemble the per-processor licenses

which were prohibited by the 1994 consent decree in the earlier US v. Microsoft antitrust case, in that a fee

is charged for each desktop or portable computer which could run a Microsoft operating system, regardless of

whether any Microsoft software is actually installed on the affected computer. These agreements are

anticompetitive because they remove any financial incentive for individuals or departments to run non-

Microsoft software.

Which practices towards end users should be prohibited?

Microsoft has used both restrictive licenses and intentional incompatibilities to discourage users from

running Windows applications on Windows-compatible competing operating systems. Two examples are given below.

1. Microsoft uses license terms which prohibit the use of Windows-compatible competing operating systems

MSNBC (a subsidiary of Microsoft) offers software called NewsAlert. Its EULA states "MSNBC Interactive grants you the right to install and use copies of the SOFTWARE

PRODUCT on your computers

running validly licensed copies of the operating system for which the SOFTWARE PRODUCT was designed [e.g.,

Microsoft Windows(r) 95; Microsoft Windows NT(r), Microsoft Windows 3.x, Macintosh, etc.]. ..." Only the

Windows version appears to be available for download. Users who run competing

operating systems (such as Linux) which can run some Windows programs might wish to run the Windows version of NewsAlert, but the EULA prohibits this.

MSNBC has a valid interest in prohibiting use of pirated copies of operating systems, but much narrower language could achieve the same protective effect with less anticompetitive impact. For instance, "MSNBC Interactive grants you the right to install and use copies of the SOFTWARE PRODUCT on your computers running validly licensed copies of Microsoft Windows or compatible operating system." 2. Microsoft created intentional incompatibilities in Windows 3.1 to discourage the use of non-Microsoft operating systems. An episode from the 1996 Caldera v. Microsoft antitrust lawsuit illustrates how Microsoft has used technical means anticompetitively.

Microsoft's original operating system was called MS-DOS. Programs used the DOS API to call up the services of the operating system. Digital Research offered a competing operating system, DR-DOS, that also implemented the DOS API, and could run programs written for MS-DOS. Windows 3.1 and earlier were not operating systems per se, but rather middleware that used the DOS API to interoperate with the operating system. Microsoft was concerned with the competitive threat posed by DR-DOS, and added code to beta copies of Windows 3.1 so it would display spurious and misleading error messages when run on DR-DOS. Digital Research's successor company, Caldera, brought a private antitrust suit against Microsoft in 1996. (See the original complaint, and Caldera's consolidated response to Microsoft's motions for partial summary judgment.) The judge in the case ruled that "Caldera has presented sufficient evidence that the incompatibilities alleged were part of an anticompetitive scheme by Microsoft." That case was settled out of court in 1999, and no court has fully explored the alleged conduct.

The concern here is that, as competing operating systems emerge which are able to run Windows applications, Microsoft might try to sabotage Windows applications, middleware, and development tools so that they cannot run on non-Microsoft operating systems, just as they did earlier with Windows 3.1.

The PFJ as currently written does nothing to prohibit these kinds of restrictive licenses and intentional incompatibilities, and thus encourages Microsoft to use these techniques to enhance the Applications Barrier to Entry, and harming those consumers who use non-Microsoft operating systems and wish to use Microsoft applications software. Is the Proposed Final Judgement in the public interest? The problems identified above with the Proposed Final Judgment can be summarized as follows:

- * The PFJ doesn't take into account Windows-compatible competing operating systems
- * Microsoft increases the Applications Barrier to Entry by using restrictive license terms and intentional incompatibilities. Yet the PFJ fails to prohibit this, and even contributes to this part of the Applications Barrier to Entry.
- * The PFJ Contains Misleading and Overly Narrow Definitions and Provisions
- * The PFJ supposedly makes Microsoft publish its secret APIs, but it defines "API" so narrowly that

many important APIs are not covered.

- * The PFJ supposedly allows users to replace Microsoft Middleware with competing middleware, but it defines "Microsoft Middleware" so narrowly that the next version of Windows might not be covered at all.

- * The PFJ allows users to replace Microsoft Java with a competitor's product -- but Microsoft is replacing Java with .NET. The PFJ should therefore allow users to replace Microsoft.NET with competing middleware.

- * The PFJ supposedly applies to "Windows", but it defines that term so narrowly that it doesn't cover Windows XP Tablet PC Edition, Windows CE, Pocket PC, or the X-Box -- operating systems that all use the Win32 API and are advertized as being "Windows Powered".

- * The PFJ fails to require advance notice of technical requirements, allowing Microsoft to bypass all competing middleware simply by changing the requirements shortly before the deadline, and not informing ISVs.

- * The PFJ requires Microsoft to release API documentation to ISVs so they can create compatible middleware -- but only after the deadline for the ISVs to demonstrate that their middleware is compatible.

- * The PFJ requires Microsoft to release API documentation -- but prohibits competitors from using this documentation to help make their operating systems compatible with Windows.

- * The PFJ does not require Microsoft to release documentation about the format of Microsoft Office documents.

- * The PFJ does not require Microsoft to list which software patents protect the Windows APIs. This leaves Windows-compatible operating systems in an uncertain state: are they, or are they not infringing on Microsoft software patents? This can scare away potential users.

- * The PFJ Fails to Prohibit Anticompetitive License Terms currently used by Microsoft

- * Microsoft currently uses restrictive licensing terms to keep Open Source apps from running on Windows.

- * Microsoft currently uses restrictive licensing terms to keep Windows apps from running on competing operating systems.

- * Microsoft's enterprise license agreements (used by large companies, state governments, and universities) charge by the number of computers which could run a Microsoft operating system -- even for computers running Linux. (Similar licenses to OEMs were once banned by the 1994 consent decree.)

- * The PFJ Fails to Prohibit Intentional Incompatibilities Historically Used by Microsoft

- * Microsoft has in the past inserted intentional incompatibilities in its applications to keep them from running on competing operating systems.

- * The PFJ Fails to Prohibit Anticompetitive Practices Towards OEMs

- * The PFJ allows Microsoft to retaliate against any OEM that ships Personal Computers containing a competing Operating System but no Microsoft operating system.

- * The PFJ allows Microsoft to discriminate against small OEMs -- including regional 'white box' OEMs which are historically the most willing to install competing operating systems -- who ship competing software.

- * The PFJ allows Microsoft to offer discounts on Windows (MDAs) to OEMs based on criteria like sales of Microsoft Office or Pocket PC systems. This allows Microsoft to leverage its monopoly on Intel-compatible operating systems to increase its market share in other areas.

* The PFJ as currently written appears to lack an effective enforcement mechanism.

Considering these problems, one must conclude that the Proposed Final Judgment as written allows and encourages significant anticompetitive practices to continue, and would delay the emergence of competing Windows-compatible operating systems. Therefore, the Proposed Final Judgment is not in the public interest, and should not be adopted without addressing these issues.

Strengthening the PFJ

The above discussion shows that the PFJ does not satisfy the Court of Appeals' mandate. Some of the plaintiff States have proposed an alternate settlement which fixes many of the problems identified above. The States' proposal is quite different from the PFJ as a whole, but it contains many elements which are similar to elements of the PFJ, with small yet crucial changes.

In the sections below, I suggest amendments to the PFJ that attempt to resolve some of the demonstrated problems (time pressure has prevented a more complete list of amendments). When discussing amendments, PFJ text is shown indented; removed text is shown in [bracketed strikeout], and new text in bold italics.

Correcting the PFJ's definitions

Definition U should be amended to read

U. "Windows Operating System Product" means [the software code (as opposed to source code) distributed

commercially by Microsoft for use with Personal Computers as Windows 2000

Professional, Windows XP Home,

Windows XP Professional, and successors to the foregoing, including the Personal Computer versions of the

products currently code named "Longhorn" and "Blackcomb" and their successors,

including upgrades, bug fixes,

service packs, etc. The software code that comprises a Windows Operating System

Product shall be determined by

Microsoft in its sole discretion.] any software or firmware code distributed

commercially by Microsoft that

is capable of executing any subset of the Win32 APIs, including without exclusion

Windows 2000 Professional,

Windows XP Home, Windows XP Professional, Windows XP Tablet PC Edition, Windows CE,

PocketPC 2002, and

successors to the foregoing, including the products currently code named "Longhorn"

and "Blackcomb" and their

successors, including upgrades, bug fixes, service packs, etc.

Release of information to ISVs

TBD

Section E should be amended to read

... Microsoft shall disclose to ISVs, IHVs, IAPs, ICPs, and OEMs, [for the sole purpose of interoperating with

a Windows Operating System Product,] for the purpose of interoperating with a Windows Operating System Product

or with application software written for Windows, via the Microsoft Developer Network ("MSDN") or similar

mechanisms, the APIs and related Documentation that are used by Microsoft Middleware to interoperate with a

Windows Operating System Product. ...

Prohibition of More Practices Toward OEMs

TBD

? III. A. 2. of the Proposed Final Judgment should be amended to read

2. shipping a Personal Computer that (a) includes both a Windows Operating System Product and a non-Microsoft

Operating System, or (b) will boot with more than one Operating System, or (c)

includes a non-Microsoft

Operating System but no Windows Operating System Product; or ...
Prohibition of More Practices Toward ISVs
TBD
Prohibition of Certain Practices Toward End Users
TBD

Summary

This document is not yet complete, but it does demonstrate that there are so many problems with the PFJ that it is not in the public interest. It also illustrates how one might try to fix some of these problems.